# LOUISIANA DEPARTMENT OF WILDLIFE & FISHERIES



## OFFICE OF FISHERIES INLAND FISHERIES SECTION

PART VI -A

WATERBODY MANAGEMENT PLAN SERIES

## RACCOURCI OLD RIVER

**HISTORY & MANAGEMENT ISSUES** 

## **CHRONOLOGY**

August 2013 - Prepared by Rachel Walley, Biologist Manager, District 7

July 2017 – Updated by Brian Heimann, Biologist Manager, District 7

March 2021 – Updated by Brian Heimann, Biologist Manager, District 7

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#### LAKE HISTORY

#### **GENERAL INFORMATION**

#### Formation

Raccourci Old River was historically the main channel of the Mississippi River. In 1848, it was separated as a State of Louisiana Project directed by Captain Shreve. Currently it is an active oxbow that maintains a hydraulic connection to the main river. The lake receives inflow from the river from the northeastern end of the lake via connection termed "The Narrows".

#### Size

4,900 surface acres at pool

#### Pool Stage

26' MSL (mean sea level) coincides with low water levels of the Mississippi River. The lake typically exceeds levels of 40' MSL during high water levels.

#### Watershed

Raccourci Old River receives inflow from Mississippi River when the river is at or above 17'MSL in Baton Rouge. The rest of the watershed consists of Raccourci Island, the area of land that is contained between the lake and the river.

#### Location

Pointe Coupee and West Feliciana Parishes (SEE APPENDIX I – LOCATION MAP).

#### **Border Waters**

Raccourci Old River is contained within the Mississippi River levees

#### **Drawdown Description**

None

#### LAKE AUTHORITY

#### Owner

State of Louisiana (State water bottom)

#### Association

Louisiana Department of Natural Resources – water bottoms Louisiana Wildlife and Fisheries Commission – all fish and wildlife

#### **Authorization**

Title 56, Title 76

#### **ACCESS**

#### **Boat Docks**

2 boat ramps

Table 1. Boat launching facilities for Raccourci Old River, LA.

Name	Coordinates	
Old River Landing	30.83752	-91.61837
Serio's	30.836817	-91.627023

(SEE **APPENDIX II** – MAP AND LANDINGS)

#### Reefs

An unknown number of artificial reef structures have been placed by individual fishermen. These include sunken Christmas trees, barges, willow trees, tires and riprap. Most are unmarked.

#### SHORELINE DEVELOPMENT

#### State/National Parks

NONE

#### Shoreline Development by Landowners

The island was once inhabited with homesteads prior to the levee system in 1927. Since then, part of the land has been farmed and leased by logging companies. Currently, less than 5% of the shoreline is developed.

#### PHYSICAL DESCRIPTION OF WATER BODY

#### Shoreline Length

Approximately 31 miles at pool.

#### Timber Type

Bottomland hardwoods occur on the island, the eastern side, and the extreme southern end of the lake. Most of the mature trees have been logged, with the remaining large trees in the lower swamp areas.

#### Average Depth

25 feet (at pool)

#### Maximum Depth

75 feet (at pool)

#### Natural Seasonal Water Fluctuation

Water levels are dependent on Mississippi River stages. A concrete weir that was constructed in the Narrows stops water from flowing over when the river stage at Baton Rouge is 15'MSL or less. When the Mississippi River reaches 17'MSL at Baton Rouge, the connection between the lake and the river is navigable.

#### **EVENTS / PROBLEMS**

1829 – Construction of the Potato Levee. The low Potato Ridge levee separates the fore bay from Raccourci Old River.

1848 – Separated from the main river to better navigation.

1940 – Morganza Spillway completed. Its purpose is to divert water from the Mississippi River to the Atchafalaya River Basin during major flood events. Mississippi River water flows through Raccourci Island and Old River to the fore bay area before flowing through the spillway (SEE <u>APPENDIX III</u> – SPILLWAY MAP). The height of Potato Levee is also increased to present height to further help divert water.

1962 – Pointe Coupee Parish Police Jury proposes the construction of a dam to disconnect the lake from the Mississippi River. Louisiana Wildlife and Fisheries Commission opposed the dam's construction (**SEE APPENDIX IV** – LETTER OF OPPOSITION)

1973- Morganza Spillway was opened.

2011 - Morganza Spillway was opened.

#### **MANAGEMENT ISSUES**

#### **AQUATIC VEGETATION**

Due to large seasonal water fluctuations, nuisance aquatic vegetation does not occur. There are no records of treatment or complaint of vegetation.

#### HISTORY OF REGULATIONS

#### **Standardized Regulations**

Statewide standard commercial and recreational fishing regulations apply. Recreational and commercial fishing regulations may be viewed at the link below: http://www.wlf.louisiana.gov/regulations

#### FISH KILLS / DISEASE HISTORY

There are no records of fish kills or disease. However, there have been reports of Asian carp specific fish kills during warm summer months. In September of 2010, hundreds of dead Silver Carp were observed scattered around the entire lake. Fish appeared to have been dead for some time. Personal communication with local fishermen revealed that the fish kill had been

ongoing for several weeks and consisted of thousands of fish. No other species were identified and no formal report was made.

#### **CONTAMINANTS / POLLUTION**

#### Water Quality

The 2018 Water Quality Integrated Report from the Louisiana Department of Environmental Quality, Water Permits Division listed Old River having the presence of a non-native aquatic plant (water hyacinth – *Pontederia crassipes*) as the lake's only impairment.

#### Fish Consumption Advisory

NONE

#### **BIOLOGICAL**

#### Fish Sampling

To monitor the sport fishery of Raccourci Old River, LDWF initiated standardized sampling in 1965 (Table 2).

Table 2. Historical and scheduled sampling on Raccourci Old River, LA from 1965 -2021.

RACCOURCI OLD RIVER SAMPLING			
1965	Rotenone, 3 stations		
1972	Rotenone, 3 stations		
1983	Rotenone, 3 stations		
2007	Electrofishing, 6 stations		
2009	Electrofishing, 6 stations		
2010	Electrofishing, 6 stations - Lead nets, 6 stations (crappie age, growth, & mortality)		
2011	Electrofishing, 6 stations - Lead nets, 6 stations (crappie age, growth, & mortality) - Gill nets, 6 stations		
2012	Electrofishing, 6 stations - Lead nets, 6 stations (crappie age, growth, & mortality)		
2013	Electrofishing, 6 stations - Lead nets, 6 stations (crappie age, growth, & mortality) - Hoop nets, 6 stations		
2014	Electrofishing, 6 stations - Lead nets, 6 stations (crappie age, growth, & mortality)		
Electrofishing, 6 stations (LMB age, growth, & mortality) Lead nets, 6 stations (crappie age, growth, & mortality) - 0			
2016	Electrofishing, 6 stations (LMB age, growth, & mortality) - Lead nets, 6 stations (crappie age, growth, & mortality) - Gill nets, 6 stations		

2017	Electrofishing, 6 stations (LMB age, growth, & mortality) -	
2017	Lead nets, 6 stations	
2019	Electrofishing, 6 stations	
2020	Electrofishing, 6 stations - Lead nets, 6 stations	
2021	Electrofishing, 6 stations - Lead nets, 6 stations - Gill nets, 6 stations	

#### **Stocking History**

Raccourci Old River has been stocked with 104,902 Florida strain Largemouth Bass since 2007 and 71,781 Hybrid Striped Bass in 2009 (Table 3).

Table 3. Stocking history of Raccourci Old River, LA from 2007 – 2009.

YEAR	FLORIDA LARGEMOUTH BASS (fingerlings)	FLORIDA LARGEMOUTH BASS (phase II)	HYBRID STRIPED BASS
2007	32,156	-	-
2008	41,446	-	-
2009	30,582	718	71,781

#### Species Profile

A list of species collected or known to occur in Raccourci Old River is found in Table 4:

Table 4. Fish species collected from or known to occur in Raccourci Old River, LA

Family, Scientific and Common Names

Amiidae – Bowfin

*Amia calva* – Bowfin

Aphredoderidae – trout perches

Aphredoderus sayanus - Pirate Perch

Anguillidae – freshwater eels

Anguilla rostrata - American Eel

Atherinopsidae - New World silversides

Menidia audens – Mississippi Silverside

Menidia beryllina - Inland Silverside

Catostomidae – suckers

Carpiodes carpio - River Carpsucker

Erimyzon sucetta - Lake Chubsucker

Carpiodes cyprinus - Quillback

Ictiobus bubalus - Smallmouth Buffalo

Ictiobus cyprinellus - Bigmouth Buffalo

Ictiobus niger - Black Buffalo

Centrarchidae - sunfishes

Centrarchus macropterus - Flier

Lepomis cyanellus - Green Sunfish

Lepomis humilis - Orangespotted Sunfish

Lepomis punctatus – Spotted Sunfish
Lepomis miniatus - Redspotted Sunfish
Lepomis macrochirus - Bluegill
Lepomis gulosus - Warmouth
Lepomis megalotis - Longear Sunfish
Lepomis microlophus - Redear Sunfish
Lepomis symmetricus - Bantam Sunfish
Micropterus punctulatus - Spotted Bass
Micropterus salmoides - Largemouth Bass
Pomoxis annularis - White Crappie
Pomoxis nigromaculatus - Black Crappie

#### Clupeidae – herrings

Alosa chrysochloris - Skipjack Herring Dorosoma cepedianum - Gizzard Shad Dorosoma petenense - Threadfin Shad

#### Cyprinidae - carps

Cyprinus carpio - Common Carp

Fundulidae – topminnows and killifishes

Fundulus chrysotus - Golden Topminnow Fundulus notatus - Blackstripe Topminnow Heterandria Formosa - Least Killifish

#### Ictaluridae - North American catfishes

Ameiurus melas - Black Bullhead Ameiurus natalis - Yellow Bullhead Ictalurus furcatus - Blue Catfish Ictalurus punctatus - Channel Catfish Pylodictis olivaris - Flathead Catfish Noturus spp. - Madtoms

#### Lepisosteidae - gars

Lepisosteus oculatus - Spotted Gar Lepisosteus osseus - Longnose Gar Lepisosteus platostomus - Shortnose Gar Lepisosteus spatula - Alligator Gar

#### Leuciscidae – minnows

Cyprinella venusta - Blacktail Shiner Notemigonus crysoleucas - Golden Shiner Notropis atherinoides - Emerald Shiner Notropis maculatus - Taillight Shiner

#### Moronidae – temperate basses

Morone mississippiensis - Yellow Bass Morone chrysops - White Bass Morone saxatilis - Striped Bass Striped bass x white bass - Hybrid Striped Bass

Mugilidae – mullets

*Mugil cephalus* - Striped Mullet Poeciliidae – livebearers

Gambusia affinis - Western Mosquitofish
Poecilia latipinna - Sailfin Molly
Polyodontidae - paddlefishes
Polyodon spathula - Paddlefish
Sciaenidae - drums
Aplodinotus grunniens - Freshwater Drum
Syngnathidae - pipefishes and seahorses
Syngnathus scovelli - Gulf Pipefish
Xenocyprididae - carps
Hypophthalmichthys nobilis - Bighead Carp
Hypophthalmichthys molitrix - Silver Carp
Ctenopharyngodon idella - Grass Carp

#### Genetics

Largemouth Bass have been tested for the Florida allele post stocking efforts. Results have indicated that the Florida gene is not assimilating into the Largemouth Bass population. Due to the resistance of the Florida gene to integrate into the native population, as well as the open connection with the Mississippi River, the lake is not a candidate for the continued stocking of Florida Bass. Genetic analysis was conducted on Largemouth Bass samples collected in Raccourci Old River during 2015, 2016, and 2017 electrofishing samples (Table 5). Allozyme starch gel electrophoresis analyses were conducted at the Louisiana State University School of Renewable Natural Resources.

Table 5. Genetic analyses of Largemouth Bass populations from Raccourci Old River, LA.

GENETICS					
Year	Number	Northern	Florida	Hybrid	Florida Influence
1992	42	100%	0%	0%	0%
2015	81	100%	0%	0%	0%
2016	154	100%	0%	0%	0%
2017	140	100%	0%	0%	0%

#### <u>Threatened/Endangered/Exotic Species</u>

Pallid Sturgeon (*Scaphirhynchus albus*) and Shovelnose Sturgeon (*Scaphirhynchus platorynchus*) inhabit the reach of the Mississippi River where it connects to Raccourci Old River. Paddlefish are inhabitants of the Lake. Common Carp, Asian carps, and Grass Carp are also present. Zebra Mussel (*Dreissena polymorpha*) shell fragments have also been observed along the lakeshore.

#### ANGLER SURVEYS

#### Creel Surveys

Creel surveys are are recreational angler surveys used to determine a relative index of fishing pressure, species targeted, catch, and harvest success. Recreational angler surveys were conducted over a 12-month period in 2015. Surveys were not collected in two of the twelve months (April/July) due to high water and the closure of all launching facilities during those months. This survey was a fixed access point survey with trailer counts. The information collected from the creel study is to be included in concurrent Largemouth Bass and Crappie stock assessments in Old River. A summary of the recreational angler survey is found in Table 6:

#### Table 6. Summary of Raccourci Old River Creel Survey 2015

Interview Days = 39 (3/mo. Dec. - Aug., 6/mo. Sept. - Nov., excluding closed months)

Interviews = 160

Avg. duration of trip = 4.6 hrs.

Avg. number in party = 1.7

Avg. distance driven = 32 miles

Catch Rates

Bass/Hr. = 0.54

Bass/Trip = 2.42

Crappie/Hr. = 0.49

Crappie/Trip = 2.23

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#### HYDROLOGICAL CHANGES

- Separated from the Mississippi River in 1848 to improve navigation.
- Construction of Mississippi River levee confined Old River and Raccourci Island to the river side of the levee.
- Construction of the concrete weir in the Narrows stops water from flowing out of the lake to the river when the river stage at Baton Rouge is 15'MSL or less.
- Operation of the Morganza Spillway draws large volumes of Mississippi River water through Raccourci Island and Old River.
- Construction of the Potato Levee further confines lake water on the Mississippi River side of the main guide levees.

#### WATER USE

**Hunting** 

Yes

Skiing Yes

Scuba Diving

No

Swimming

Yes

<u>Irrigation</u>

No

**Fishing** 

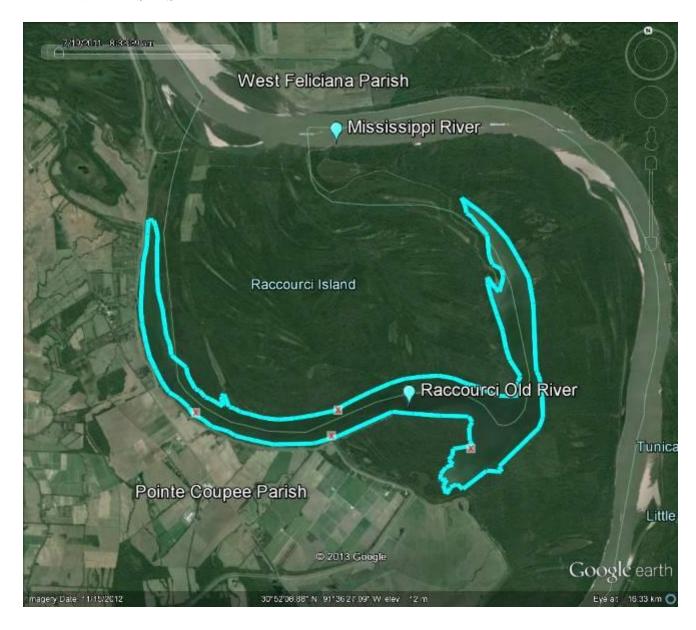
Yes

Boating Yes

#### APPENDIX I

(return to parishes)

#### MAP AND PARISHES



### APPENDIX II

(return to boat docks)

## MAP AND LANDINGS



## APPENDIX III

(return to events)

## SPILLWAY MAP



\*Natural-color satellite image of the Floodway on May 15, 2011

#### APPENDIX IV

(return to events)

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#### LETTER OF OPPOSITION

#### THE MANAGEMENT VIEWPOINT

SUMMARY OF REPORT
COMMENTS ON PROPOSED DAM ON OLD RIVER
BATCHELOR, LOUISIANA\*

A request was made by the Pointe Coupee Parish Police Jury to the Department of Public Works for a survey and study for a dam on the channel connecting Old River, a large backwater lake, with the Mississippi River. Consequently, the Department of Public Works designed a structure to raise the flood stage of Old River to 26.0 feet above mean sea level (MSL). The purpose of this report is to comment on the effects of the dam on the Old River sport fishery.

The present control stage of the outlet of Old River is 17 feet MSL. Therefore, the dam will raise the water level in the lake 9 feet. The lake presently has an area of 3,250 acres at pool stage. At 26 feet MSL the lake will have an area of 4,900 acres. Thus the area of the lake will be increased by 1,630 acres, and this additional area will have an average depth of 4.5 feet.

I recommend that the proposed dam not be constructed. I am of the opinion that the dam would be detrimental to the sport fishery to some degree. This is not to imply that it would completely ruin or eliminate the sport fishery. Even with the dam, Old River would support a good sport fishery; however, not as good as without the dam.

Studies have shown that there is a strong correlation between fish production and mean depth of the lake, other factors being equal. The productivity of a lake increases as the mean depth of the lake decreases.

An increase in the average depth of Old River would be expected to lower its productivity. At the moment, consider that area of the lake which is already permanently flooded, i.e., the 3,250 acres below 17 feet MSL. It is estimated that the dam would increase the average depth by 50 per cent. This should lower the productivity of the lake.

The reason for this is that the energy budget in a lake is in many instances the factor limiting production. Productivity is a function of incident radiation, depth of mixing, respiration, and transparency. On lakes which are not stratified, the depth of the water would determine the depth of mixing. As the depth of water increases, basic productivity decreases.

\*Lambou, Victor W. 1962, Comments on Proposed Dam on Old River, Batchelor, Louisiana. La. Wild Life and Fisheries Commission, 37pp., mimeo. In waters which stratify during the summer, the depth of the thermocline determines the depth of mixing. I assume that Old River stratifies. A top water withdrawal from a lake during the summer has been shown to shoal the thermocline, and thus increase productivity. By raising the water level, the length of time during the summer that water is flowing out from the top of the lake will be shortened considerably. This should increase the depth of the thermocline and consequently reduce productivity.

Now to consider that portion of the lake which is not now permanently looded, but would be if the dam was built. These 1,630 acres would be more productive to fish life if it is not permanently flooded.

The apparent decline in productivity of stable impoundments can be correlated with the availability of plant nutrients in the bottom soil. During the initial period of high productivity, the fixed nitrogen, phosphates, and ionizable salt contents of the water are satisfactorily high. This is produced by the solution of material leached from the organic debris, chiefly trees, brush, and grass left on the floor of the basin before flooding. From the fixed nitrogen of the plant material leaching into the water, a nitrogen food chain for higher animals is started with bacteria and protozoa as basic links. However, after a time, when the fixed nitrogen of the plant material has been exhausted, production declines. Following this period, the fertility of the lake is dependent upon what nutrients are washed in from the watershed or can be obtained from the bottom soils.

Old River would not lose fertility like some lakes, because the turbid waters entering from the Mississippi River each year are rich in nutrients and would have a fertilizing effect. However, the food chain would be different in this area if it was permanently flooded. I do not believe the resulting chain is as efficient as the type of food chain which would occur if the area would not be permanently flooded.

When the water is removed, the soil nutrients in the bottom are broken down into forms which are readily utilized. Also, the productivity of lakes can be increased by the invasion of plant life into the zone of fluctuation. It is an accepted fact that the above process of increasing soil fertility occurs on well aerated soils and not on wet or submerged soil. Much of this is available when the area is again flooded; however, more important, much of it is utilized by higher plants to support a rank growth of terrestial vegetation. This tremendous amount of organic material is a form of stored energy which can be utilized when the land is again flooded. The breakdown of the organic matter produces a tremendous amount of food for fishes during the time of the year when they are making their most rapid growth. This timing of the release of the food supply for the larger fishes is as important as the quality of food produced. In the case of crayfish, practically all of the animals can be utilized for food by different sizes of fishes. Crayfish can produce a tremendous poundage of animal life, probably in excess of several thousand pounds per acre, over a period of several months.

Crayfish are important in the diet of the large predaceous fishes in backwater lakes. During 1959, when largemouth bass had to turn to other foods because of the failure of the crayfish crop, the bass fed less often on forage of smaller size, with the result that the population was in poorer condition. The production of crayfish in any quantity is correlated very closely with water fluctuation. It is necessary for the water to get off the land for their production in any quantity. The reduction of the time and area overflowed would have an adverse effect on the crayfish production. The area above 26 feet MSL would still produce crayfish; however, the raising of the lake would cut down on the length of time the crop would be produced and also the length of time the predators could utilize this source of food.

There is a good possibility that much of this additional area flooded would not be utilized for fishing purposes extensively. Some of it is thickly wooded with the exception of the area known as Mondu Lake. Until the timber died and decomposed, much of it would be extremely thick and hard to get into and around. Also there is a good possibility that aquatic weeds would become abundant, making it hard for fishermen and predaceous fish to utilize it during low water stages.

I have noticed that the backwater lakes which have the greatest fluctuation of water levels on an area basis and also which have the greatest period of fluctuation as measured in time have the best sport fishing. It is the extremes in fluctuation on an area and time basis which have the most desirable effects on the sport fisheries and unless the fluctuation is extreme, it will have little effect on the fish population.

Over the past 20 years (1942-1961), the extent of the overflow on Old River as measured in days would have been reduced by 33.4 per cent, ranging from 14 to 75 per cent reduction for individual years. It is estimated that if the whole surrounding area was overflowed, there would be approximately 38,000 acres flooded. However, very seldom, if ever, would the water get this high. During many years the water will not get above 40 feet MSL in the lake for any extended period of time. If the whole area was flooded, the lake would have a ratio of maximum to minimum pool area of 11.7 and with the dam it would be 7.7. If 40 feet MSL is considered the maximum pool area, the ratio is 6.2 without the dam and 4.0 with it. Thus it appears that there would be a noticable reduction in the maximum to minimum pool area.

The quality and quantity of sport fishery afforded by a lake is dependent as much upon the type of fish population it supports as upon its productivity. Fish populations can be divided into four types: (1) CROWDED POPULATIONS, (2) BALANCED FOPULATIONS, (3) EXPANDING POPULATIONS, and (4) FLUCTUATING POPULATIONS. CROWDED POPULATIONS, which are one of the principal causes of poor fishing, usually occur as a result of inadequate predation. Such populations occur usually in bodies of water in which changes in environmental conditions are minimized. BALANCED POPULATIONS usually affect good fishing and are characteristic of managed farm ponds. It is dependent on the establishment and maintenance of a delicate balance between predator and prey. EXPANDING POPULATIONS almost invariably provide good fishing. It is characteristic of new lakes and new large impoundments. FLUCTUATING POPULATIONS also invariably provide good fishing and are similar to expanding populations. The expanding phase in new impoundments occurs throughout the growing season and over a span of several years. The phase in which the population is rapidly expanding in the backwater lakes occurs only during part of the growing season, but it usually occurs to a greater or lesser extent each year. FLUCTUATING POPULATIONS are typical of lakes with extensive fluctuations of water levels.

It is the FLUCTUATING type of population we want to encourage on Old River. Any reduction of the duration and extent of the overflow would tend to stabilize the fish population to some degree.

One of the factors in fluctuating water levels is its effects on reproduction, especially bass reproduction. In many Louisiana lakes most of the largemouth bass don't spawn. They develop eggs; however, these are not spawned and are eventually reabsorbed. This is due to the effects of the "Repressive Factor." Certain fishes excrete or secrete a hormone-like substance in the water which acts as a repressive factor inhibiting reproduction. During overflow periods this repressive factor is diluted out, and during the big overflows, if they occur at the right time of the year, we get tremendous hatches of largemouth bass, crappie, white bass, and the types of sport fishes we wish to encourage. By building the dam, and thus reducing the extent and duration of the overflow, the repressive factor would not be diluted out as much as formerly and this could have adverse effects on the reproduction of largemouth bass and other species.

Overflow limits the competition for food, space, and spawning territory. Young fish have an extremely abundant source of food, and thus their mortality rates are reduced and growth rates increased. Food in the form of fish and crayfish are plentiful for the large predators, allowing them to make rapid growth.

In the backwater lakes two factors control the establishment of strong year classes of largemouth bass. These are: (1) extensive overflow at the right time of the year and (2) the overflow must last long enough during the spring and summer to allow the young bass to get a good start in growth. The proposed dam on Old River would have an adverse effect on these two factors controlling the strength of year classes of largemouth bass.

Largemouth bass (also white bass where they occur) are one of the most important predators on small fishes. Predation by them is necessary to keep forage fishes from becoming overabundant. This is especially true in the case of surfishes. If large numbers of small sunfishes are not eaten by the large predators, they would soon become overabundant and stunted and furnish very little bream fishing of poor quality.

During late summer and fall, largemouth bass are able to more efficiently feed on forage fishes (this is the time of year when most of the spring crop of crayfish would be gone) if the water levels are low, crowding the forage fishes somewhat and bringing them out of cover (brush and aquatic weeds). The dam on Old River would keep the water higher, and the forage fish would have more cover and be less available to predators which would have an adverse effect.

It should be helpful to consider how fishing pressure, yield, catch per unit of effort, and population levels are all related. With a relatively high fishing pressure, an increase in fishing pressure has practically no effect in the catch per unit of effort; however, the catch per unit of effort is low. Below this point the rate of catch increases slowly with dimishing fishing pressure. With a further decrease in fishing pressure the

rate increases more rapidly and then very rapidly. Presumably at some level of fishing pressure the population would become overfished, and the size of the population would decrease and yield would become less. However, normally this does not happen in sport fisheries because as catch per unit of effort decreases some fishermen will quit fishing that body of water and fishing will be stabilized at a point below the previous level.

It is contended by some that fishing has declined on Old River. Presumably, most sport fishermen on Old River would measure the quality of sport fishing by the catch per unit of effort. However, fishing pressure on Old River has increased tremendously over a period of say 5 to 10 years. In all probability, total yield of sport fish for Old River has increased, but the catch is divided among more fishermen.

Some of the proponents of the dam maintain that when the water is falling and the backwater reaches a certain level, bass fishing becomes extremely good, and therefore if the water level is maintained at this level, fishing will remain good. I have seen this type of management tried before, and without exception it did not work out.

My experience is that the bonanza in bass fishing is usually while the waters are receding rapidly and not when the water level is stabilized. It should be pointed out that at the stage when fishing is now so good, the water is receding, usually rapidly. However, with the dam, it will be stabilized at that level. This period of exceptionally good fishing is probably explained by the following facts. Previously, the poundage of bass has increased while the water is high, and during this time most of the fish were not vulnerable to fishermen. When the water recedes there is a harvestable supply of bass; however, as soon as they are reduced in number, the catch per unit of effort will decrease. Also, they are not educated to the deadly effect of the fishermen's lure.

It is a common belief among sport fishermen who fish backwater lakes that most of the good fishing in these lakes is due to the fact that they are restocked in large numbers each year by fish from the rivers during high water stages. However, in the case of largemouth bass, crappie, and sunfishes (with the possible exception of white bass), I don't believe that the so-called "restocking" from the river has much effect on the resident fish population. I have noticed during a drought year if a shallow backwater lake dries up resulting in the killing of the resident population, it usually takes 2 or 3 years for the bass fishing to return.

In summary, if the objective is to improve sport fishing, I recommend that the dam not be constructed.

Victor W. Lambou Louisiana Wild Life and Fisheries Commission Baton Rouge, Louisiana